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The North Pickering Project

Identification of Manufacturing
Growth Industries
[Background Paper No. 8]

December, 1974



Ministry of
Housing

Ontario

This report was prepared as background material in the Planning of The North Pickering Planning Area and does not necessarily constitute a recommendation of the North Pickering Project nor approval of the Government of Ontario.

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IDENTIFICATION OF MANUFACTURING
GROWTH INDUSTRIES REPORT

At present, little information on growth industries in Ontario is available.

As an input to planning the Economic Development of the North Pickering Planning Area, this study examined growth industries which were defined as industries that are expanding their operations (i.e. employing more people; serving a larger market or a larger share of a market; producing more goods; etc.) as measured by the increase in the number of firms in an industry, the increase of the number of production workers in an industry, the increase in the amount of money paid as wages, and the index of industrial production.

Omitted from this study were growth industries defined as industries with strong inter-industry linkage.

The data presented in the first half of the study are the number of firms, the number of employees, and the amount paid in wages for 20 manufacturing categories of the Standard Industrial Classification (SIC), for Canada, Ontario and Toronto. The index of industrial production was gathered for the 20 manufacturing categories for Canada only.

The data presented in the second half of the study are the number of firms, the number of employees, and the amount paid in wages for the top manufacturing industries ranked according to the most recent year for which data were available for Toronto and Ontario. The index of industrial production was also ranked for the top manufacturing industries, but only for Canada.

The time period covered (as far as possible) was 1960 to 1972 inclusive, although there are many gaps in the

information, especially for Toronto.

The results of the study indicate that several of the most rapidly expanding manufacturing industries in Ontario are Motor Vehicle Parts and Accessories, Motor Vehicle and Truck Body and Trailer Manufacturers, Household Radio and T.V., Metal Stamping, Pressing, and Coating, Wire and Wire Products, Manufacturers of Industrial Chemicals, Iron Foundries, Sawmills and Planing Mills, Plastic Fabricators, and Communications Equipment Manufacturers. These industries corresponded closely to the most rapidly growing manufacturing categories: Transportation Equipment Manufacturers, Metal Fabricating Industries, Electrical Products, Furniture and Fixtures, Primary Metals, Paper and Allied Industries, Machinery Industries and Wood Industries.

Source of Data

The source of the data was Statistics Canada. The volumes consulted were Manufacturing Industries of Canada (Section G, Geographical Distribution; #31-209), General Review of the Manufacturing Industries of Canada (Vol. I: The Industries by Province; #31-201), Manufacturing Industries of Canada; Ontario (#31-206), and Indexes of Real Domestic Production by Industry (#61-005).

Method

From these publications, information was obtained concerning wages, the number of production and related workers, and the number of firms for Canada, Ontario, and Toronto. Where possible, the time period covered was 1960 to 1972.

Also collected was the productivity index for Canada covering the same period of time.

Canada, Ontario, and Toronto were the chosen geographical areas for several reasons. Toronto is the largest city closest to North Pickering for which information was available. The rationale for its choice was that industries growing in Toronto would be equally successful in North Pickering due to the proximity of its location. Unfortunately, much of the necessary information was not fully available for Toronto and as a result, efforts were concentrated on gathering complete information for Ontario.

Both Toronto and North Pickering are located in the 'golden horseshoe region' of Ontario. Since this region is the heart of Ontario, most data about the Province refer to this region and are therefore relevant to the study. Also, by using the figures for Ontario, growth industries located in the Province, but not in Toronto, could be identified.

The use of data for all of Canada in Tables 1, 2, 3, 4, and 5 provides both a check and support for the remaining information. By comparing data for Ontario with that for Canada any strong growth manufacturing categories that exist outside Ontario can be identified. Also, it was hoped that the choice of growth industries based on the data for Ontario would be supported by similar results from the information for Canada.

The productivity index for all of Canada was used because it was available and it was necessary to have some indication of an industry's production performance over

the years of the study.

The information gathered was assimilated and placed into 12 tables located in the body of the report. The first six tables are divided into the 20 manufacturing categories given by Statistics Canada in the Standard Industrial Classification. The remaining six tables rank the top manufacturing industries in the areas of number of establishments, number of production and related workers, wages, and productivity.

These twelve tables are used to display the key information gathered for this study. The first five tables cover for Canada, Ontario and Toronto, the number of firms; the number of production and related workers (in real terms and as a percentage change between years); and the amount paid in wages (in absolute terms and as a percentage change). Table six contains the index of industrial production for all of Canada for each of the 20 manufacturing categories.

These first five tables deal only with the 20 manufacturing categories as it was intended to locate those "areas" of the economy which are expanding, as measured by the indicators. These general categories did not reveal which specific industries were growing fastest, but it was hoped that this information would be revealed by the next set of six tables. In the first five tables (of the next six), the top manufacturing industries for Ontario and Toronto were ranked in descending order for a) the number of establishments, b) the number of production and related workers (in real terms and as a percentage change between the years) and c) the amount paid in wages (in absolute terms and as a percentage change between years). The twelfth table is a ranking of the top manufacturing industries in Canada based upon the index of industrial production.

By ranking the top manufacturing industries in each of the four areas, those industries with the most rapid growth through the ten years which the study covers were identified. This also facilitated checking whether a specific growth industry which rated highly in this section of the study also belonged to one of the general manufacturing categories which was chosen as growing, from the first six tables.

The number of establishments, the number of production and related workers, the amount of wages paid, and the productivity index were used as indicators of growth on the grounds that if these indicators were increasing or positive for an industry, then that industry was probably experiencing growth. More specifically it was assumed that if the number of firms in an industry increased over a period of time, despite the usual trend towards larger and fewer establishments for reasons of efficiency, greater profit, and competition which may eliminate some plants, then that industry was probably growing. Also, if the numbers of workers in an industry was increasing, despite the usual trend toward fewer workers producing more through greater use of capital, then that too was probably a growing industry. Larger amounts of money paid for wages was treated as an indicator of expansion in an industry. Greater productivity, reflected by a higher industrial productivity index, should also indicate a healthy, growing industry.

These indicators are, of course, imperfect. Some industries may decentralize over time, because a number of smaller plants close to markets serve better than one or two large establishments. This process would appear as growth in the table showing

the number of firms. However, other indicators (number of workers, wages, productivity) would provide a check on whether growth has occurred.

The increase in the amount of wages paid over a period of years may be due to inflation, higher negotiated settlements, an increased number of workers employed by an expanding industry or to higher productivity. Again, comparison of the indicators serves to isolate the reason for the growth.

The indicators chosen will not fully reveal the growth of all industries. Those which are automating and increasing output by capital investment might show a decline in the number of firms, the number of workers and even the size of the labour bill. Consequently, they will only appear as growth industries in the index of industrial production. This apparent shortcoming is rationalized by the objective of the study which was to determine, in the interests of planning the economic base for a new town, which industries are not only growing but are employing more workers and paying higher wages.

For all tables, except six and twelve, the information for Toronto is limited and fragmentary. Only the years 1960, 1961, and 1964 to 1967 were available at the time of the study and even these years did not have complete information. Statistics Canada was consolidating the data for metropolitan centres during the '60's and as a result many individual categories disappeared each year and were included in the "other" category. Consequently, an industry, large in terms of the number of establishments or the number of workers, in the Ontario table may not be

included in the Toronto table, due to the limitations of the data from which the study was done. The data for Ontario present a much more complete picture for study.

It should be noted that there is a number of industries for which no specific classification is given and these industries are listed under "Miscellaneous Manufacturing Industries". In the present study, the above industries are not considered because of the inconsistency of information on these industries.

The information for Canada in tables 1, 2, 3, 4 and 5 covers only the years 1967 and 1971 inclusive, because this was the most recent information available. The information for all Canada was too general (i.e. too vast an area is involved with too many situations different from those found in Ontario) to be weighed more heavily than Ontario. For these reasons, only data from 1967 to 1971 were included.

The Standard Industrial Classification (SIC) is given beside each industry category or each individual industry on each table.

Table 1 - Number of Firms

The total number of firms for each general manufacturing category is given for the years 1967 to 1971 for Canada, 1960 to 1969 for Ontario, and 1960, 1961, 1964 to 1967 for Toronto.

Table 1

Standard Industrial Classification	Industries	CANADA					ONTARIO					METROPOLITAN TORONTO										
		1967		1968		1969	1960		1961		1962	1963		1964		1965	1966	1967				
5:01	Food & Beverages	6737	6361	6082	5778	5599	3132	2737	2712	2639	2583	2460	2386	2307	2148	2049	514	540	549	540	539	544
5:02	Tobacco Products	34	30	30	29	29	17	16	18	18	18	18	16	15	13	13						
5:03	Rubber Industries	107	104	104	107	106	47	48	47	50	52	50	55	56	53	55	11	16			16	20
5:04	Leather Industries	529	513	521	487	470	218	200	208	204	210	205	204	195	195	201	93	90	99	98	99	97
5:05	Textile Industries	990	967	973	953	935	391	373	370	374	374	379	390	395	388	391	193	191	196	194	199	200
5:06	Knitting Mills	339	342	333	318	318	132	131	125	128	123	125	118	115	112	108	63	65	61			
5:07	Clothing Industries	2311	2282	2289	2184	2164	639	581	563	552	548	523	548	540	529	526	524	481	460			
5:08	Wood Industries	3793	3477	3503	3330	3164	1361	922	917	871	863	817	806	816	771	777	96	105	121	125	123	129
5:09	Furniture & Fixtures	2296	2300	2313	2209	2165	828	837	877	870	922	922	936	938	927	944	365	394	436	447	457	463
5:10	Paper & Allied Industries	633	635	640	638	645	260	259	261	260	267	265	276	279	287	291	134	143	142	141	147	148
5:11	Printing & Publishing	3568	3600	3650	3600	3649	1468	1464	1496	1480	1453	1470	1491	1526	1545	1583	720	752	751	752	795	804
5:12	Primary Metal Industries	415	405	417	407	405	205	200	201	201	204	204	210	214	207	216	57	60	59	60	56	59
5:13	Metal Fabricating	3956	3983	3991	4031	4109	1459	1493	1567	1579	1738	1826	1933	2019	2053	2066	600	660	806	839	850	950
5:14	Machinery Industries	752	795	830	848	910	324	331	344	363	392	415	438	458	482	498	120	141	169	185	196	205
5:15	Transportation Equipment	852	871	881	905	963	280	281	293	295	319	318	338	352	358	357	64	82	93	92	101	107
5:16	Electrical Products	667	689	720	735	763	355	346	345	360	378	379	410	428	440	450	186	197	221	222	241	248
5:17	Non-Metallic Minerals	1291	1260	1286	1298	1323	549	519	535	538	532	523	538	525	516	519	115	151	156	156	157	149
5:18	Petroleum & Coal	91	95	99	94	101	26	24	26	26	25	25	25	27	26	29	14	16				
5:19	Chemical & Chemical Products	1142	1124	1136	1128	1139	562	528	535	534	564	564	586	577	575	578	289	288	300	305	312	304
5:20	Miscellaneous Manufacturers	2764	2810	2871	2849	2951	1134	1120	1146	1148	1216	1248	1282	1294	1305	1320	583	616	695	721	750	764

Table 2 - Number of Employees

This table gives the total number of production and related workers (rounded to the nearest thousand) employed in each general manufacturing category for Canada, Ontario and Toronto except for Toronto 1960 and 1961 where the figures are for all employees.

Table 3 - Number of Employees (% Change)

Based on Table 2, Table 3 gives the percentage change between the years in the number of production employees for each manufacturing category, to make explicit the size and direction of changes.

Table 3 Standard Industrial Classification NUMBER OF EMPLOYEES (Production & Related Workers)

Standard Industrial Classification	Industries	CANADA					ONTARIO					Source: Statistics Canada					METROPOLITAN TORONTO*				
		1968	1969	1970	1971	1962	1963	1964	1965	1966	1967	1968	1969	1961	1962	1963	1964	1965	1966	1967	
5:01	Food & Beverages	- 0.4	- 0.8	2.0	- 0.8	0.0	- 0.6	2.7	2.5	3.4	0.3	- 3.3	- 1.7	0.6				3.7	1.5	2.5	
5:02	Tobacco Products	- 3.9	- 1.4	- 1.4	- 2.8	22.7	0.0	- 7.5	- 4.0	0.0	12.5	- 7.5	0.0								
5:03	Paper Industries	-10.9	3.6	- 5.3	- 3.8	8.3	12.5	0.8	5.9	8.8	- 3.7	-13.8	3.5	- 7.0							
5:04	Leather Industries	0.7	- 1.9	- 8.4	0.0	4.1	0.8	2.3	- 1.6	- 2.4	- 5.7	2.5	- 0.9	8.8				5.7	- 2.8	5.5	
5:05	Textile Industries	- 4.0	3.1	- 4.4	0.5	8.0	4.2	7.1	4.2	9.0	- 4.2	6.5	1.6	11.7				0.0	7.5	0.0	
5:06	Knitting Mills	4.0	4.8	- 4.2	0.9	1.3	2.6	- 2.6	3.9	- 3.8	- 7.9	- 1.5	- 2.9	7.1							
5:07	Clothing Industries	0.0	2.1	- 0.7	1.0	8.0	2.6	4.6	- 0.5	6.4	2.8	0.0	- 1.0	- 0.7							
5:08	Wood Industries	0.2	2.4	- 4.2	2.8	5.6	0.0	6.8	3.5	9.5	- 1.3	- 1.9	- 2.0	21.0				4.3	- 4.2	4.3	
5:09	Furniture & Fixtures	2.0	2.8	- 2.0	1.4	2.4	5.6	9.0	4.8	11.2	0.0	- 3.0	6.1	7.9				1.5	9.0	4.1	
5:10	Paper & Allied Industries	-12.2	16.5	- 0.5	- 0.8	1.3	0.6	5.1	3.2	5.0	0.5	- 1.2	3.3	1.8				9.1	7.3	1.9	
5:11	Printing & Publishing	0.4	- 0.7	3.9	0.6	- 0.5	0.8	- 2.3	2.2	5.7	2.9	0.0	- 1.3	3.0				2.2	7.2	3.3	
5:12	Primary Metal Industries	- 0.7	- 3.1	6.2	- 2.6	3.4	1.5	7.4	9.1	5.6	- 2.0	- 0.6	- 8.4	- 2.3				0.0	16.6	2.2	
5:13	Metal Fabricating Industries	- 1.8	4.0	0.7	- 3.2	10.2	5.7	7.9	11.0	7.8	- 4.8	- 1.1	4.1	9.8				9.0	-12.0	19.6	
5:14	Machinery Industries	- 6.6	9.6	- 3.7	- 3.5	7.8	10.4	10.2	11.8	7.9	3.6	- 7.5	9.9	3.1				10.8	6.8	7.3	
5:15	Transportation Equipment	- 0.8	6.5	- 9.1	5.7	8.8	15.5	17.0	11.9	7.2	- 2.7	- 0.3	4.4	120.0				1.8	23.3	2.9	
5:16	Electrical Products	- 2.5	5.6	- 6.6	- 1.6	11.3	10.2	4.8	7.9	10.6	- 1.3	- 4.7	5.1	11.9				9.1	11.6	- 2.5	
5:17	Non-Metallic Minerals	0.8	0.7	- 4.5	5.4	2.6	7.7	6.6	5.0	6.4	- 3.6	0.5	3.1	36.9				8.3	0.0	- 7.7	
5:18	Petroleum & Coal	1.4	- 4.3	1.5	- 1.5	- 4.2	0.0	0.0	- 4.4	0.0	0.0	0.0	- 4.6	46.1							
5:19	Chemical & Chemical Products	2.1	2.5	0.7	- 4.0	4.0	3.3	2.1	1.5	6.7	2.4	1.4	0.9	0.8				3.7	2.4	2.3	
5:20	Miscellaneous Manufacturers	7.7	4.4	- 2.0	1.4	5.8	5.4	8.8	3.6	8.8	3.2	7.2	4.4	9.0				2.9	5.8	5.4	

* All Employees for 1960 and 1961

* All Employees for 1960 and 1961

Table 4 - Wages and Salaries

This table shows the total amount of the wages (rounded to the nearest million) paid to production and related workers in each general manufacturing category (except for Toronto 1960 and 1961 where the figure is the amount paid to all employees).

Table 4
Standard
Industrial
Classification

WAGES & SALARIES - ABSOLUTE NUMBERS
(FOR PRODUCTION & RELATED WORKERS)

Industrial Classification	CANADA (MILLIONS OF DOLLARS)					ONTARIO (MILLIONS OF DOLLARS)					Statistics Canada				
	1967	1968	1969	1970	1971	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Industries															
Food & Beverages	625.9	668.3	718.8	785.3	852.9	221.2	174.5	182.4	188.4	203.6	220.3	238.9	256.7	268.5	288.5
Tobacco Products	40.0	42.3	43.8	49.5	51.4	7.1	7.0	8.5	9.4	9.1	9.6	10.2	12.0	12.1	13.2
Rubber Industries	97.6	93.1	104.7	107.4	112.3	42.8	41.7	48.5	52.8	58.0	64.1	71.8	73.7	68.5	78.0
Leather Industries	92.0	100.0	104.3	100.4	108.7	30.6	33.8	36.0	37.3	40.2	40.6	43.0	43.3	47.4	50.0
Textile Industries	243.4	253.9	281.2	284.0	310.8	55.2	55.7	61.9	67.0	76.0	83.4	97.2	99.0	110.1	126.0
Knitting Mills	63.9	71.1	80.9	81.8	88.9	16.9	18.6	19.3	20.3	21.6	23.3	23.7	23.1	23.5	24.6
Clothing Industries	270.4	292.1	321.0	334.1	362.0	47.1	48.6	50.8	54.5	59.2	62.1	69.4	70.3	74.2	79.0
Wood Industries	364.6	396.4	439.3	446.4	517.4	38.3	37.8	42.1	42.8	48.2	53.0	61.6	64.8	68.0	73.1
Furniture & Fixtures	147.3	154.5	171.8	173.3	187.1	41.2	40.1	43.0	46.9	53.6	58.4	69.0	71.8	75.2	86.3
Paper & Allied Industries	549.5	584.0	651.3	687.8	734.8	125.2	129.1	134.8	140.2	152.9	162.7	184.4	195.3	207.8	229.8
Printing & Publishing	269.5	289.4	309.8	337.8	357.8	99.5	100.3	105.0	108.9	112.9	120.4	131.3	141.2	151.4	161.2
Primary Metal Industries	542.0	570.2	583.5	680.8	714.6	214.9	219.8	232.5	243.2	269.9	310.0	335.7	343.7	371.3	358.3
Metal Fabricating	559.7	587.2	662.2	717.0	741.9	169.4	173.2	195.5	213.2	240.9	279.3	322.1	323.2	340.0	385.1
Machinery Industries	273.2	269.4	322.4	331.9	348.1	93.8	91.0	103.0	119.1	139.5	163.0	186.8	201.0	196.1	234.6
Transportation Equipment	666.4	747.8	837.4	787.9	912.2	199.2	199.6	235.8	291.5	347.6	425.0	455.6	460.5	525.6	583.3
Electrical Products	377.4	401.2	445.5	449.5	467.2	129.0	137.1	156.7	178.8	195.9	218.1	251.2	258.2	266.9	294.8
Non-Metallic Minerals	207.2	223.2	246.2	246.3	283.1	63.4	63.0	72.1	75.1	84.4	93.6	106.9	108.7	118.2	133.7
Petroleum & Coal	52.5	56.7	61.2	64.8	68.2	13.1	13.1	13.5	13.7	14.4	13.8	16.1	17.8	18.8	21.6
Chemical & Chemical Products	211.9	232.4	259.0	279.9	288.6	75.5	78.0	83.2	88.3	93.1	98.4	112.5	121.0	132.1	145.4
Miscellaneous Manufacturers	214.7	245.5	277.2	286.7	310.9	67.3	76.2	82.5	89.3	101.1	109.3	125.5	140.8	162.6	182.6

*All employees
for 1960 and
1961

METROPOLITAN TORONTO*
(MILLIONS OF DOLLARS)

1960	1961	1962	1963	1964	1965	1966	1967
122.0	125.7		80.2	87.1	92.3	102.0	
19.9	19.2			21.9	24.3	25.7	
10.0	11.2		11.0	12.0	12.7	14.1	
17.5	20.3		17.3	18.5	21.8	23.3	
7.7	8.5		8.4				
47.9	48.0		44.0				
6.8	8.6		9.0	10.0	10.2	11.2	
22.8	24.8		24.9	26.4	30.8	33.4	
47.1	49.9		37.9	43.5	48.3	52.5	
112.1	117.7		74.2	78.9	86.7	93.0	
20.7	20.6		18.4	18.9	23.3	23.5	
96.1	105.8		99.4	115.4	104.1	134.9	
62.5	65.0		50.7	56.2	63.4	70.3	
33.7	83.7		85.6	89.7	121.9	128.5	
98.2	100.1		83.8	95.5	110.2	114.2	
21.1	29.8		30.1	34.3	37.0	36.7	
16.6	24.7						
52.5	55.0		33.9	36.7	40.0	42.5	
64.2	72.1		62.7	68.0	75.2	86.4	

Table 5 - Wages and Salaries (% Change)

Based on Table 4, Table 5 displays the percentage change between years for the total wage bill in each general manufacturing category, to make **explicit** the size and direction of changes.

Table 5
W A G E S & S A L A R I E S C H A N G E
(FOR PRODUCTION & RELATED WORKERS)

Source:
Statistics Canada

Standard Industrial Classification Code	Industries	CANADA										ONTARIO					METROPOLITAN TORONTO*				
		1968	1969	1970	1971	1961	1962	1963	1964	1965	1966	1967	1968	1969	1961	1962	1963	1964	1965	1966	1967
5:01	Food & Beverages	6.7	7.5	9.2	8.6	-21.2	4.5	3.2	8.0	8.2	8.4	7.4	4.5	7.4	3.0				8.6	5.9	10.5
5:02	Tobacco Products	5.7	3.5	13.0	3.8	-1.5	21.4	10.5	-3.2	5.4	6.2	17.6	0.8	9.0							
5:03	Rubber Industries	-4.7	12.4	2.5	4.5	-2.6	16.3	8.8	9.8	10.5	12.0	2.6	-7.1	13.8	-3.6				10.9	5.7	
5:04	Leather Industries	8.6	4.3	-3.8	8.2	10.4	6.5	3.6	7.7	0.9	5.9	0.6	9.4	5.4	12.0				9.0	5.8	11.0
5:05	Textile Industries	4.3	10.7	0.9	9.4	0.9	11.1	8.2	13.4	9.7	16.5	1.8	11.2	14.4	17.3				6.9	17.8	6.8
5:06	Knitting Mills	12.2	12.8	1.1	8.6	10.0	3.7	5.1	6.4	7.8	1.7	-2.6	1.7	4.6	10.3						
5:07	Clothing Industries	8.0	9.8	4.0	8.3	3.1	4.5	7.2	8.6	4.8	11.7	1.2	5.5	6.4	0.2						
5:08	Wood Industries	8.7	10.8	1.6	15.9	-1.4	11.3	1.6	12.6	9.9	16.2	5.1	4.9	7.5	26.4				11.1	2.0	9.8
5:09	Furniture & Fixtures	4.8	11.1	0.8	7.9	-2.7	7.2	9.0	14.2	8.9	18.1	4.0	4.7	14.7	8.7				6.0	16.6	8.4
5:10	Paper & Allied Industries	6.2	11.5	5.6	6.8	3.1	4.4	4.0	9.0	6.4	13.3	5.9	6.4	10.5	5.9				14.7	11.0	8.6
5:11	Printing & Publishing	7.3	7.0	9.0	5.9	0.8	4.6	3.7	3.6	6.6	9.0	7.5	7.2	6.4	4.9				6.3	9.8	7.2
5:12	Primary Metal Industries	5.2	2.3	16.6	4.9	2.2	5.7	4.6	10.9	14.8	8.2	2.3	8.0	-3.6	-0.5				2.7	23.2	0.8
5:13	Metal Fabricating	4.9	12.7	8.2	3.4	2.2	12.8	9.0	12.9	15.9	15.3	0.3	5.1	13.2	10.0				16.0	-9.8	29.5
5:14	Machinery Industries	-1.4	19.6	2.9	4.8	-3.0	13.1	15.6	17.1	16.8	14.6	7.6	-2.5	19.6	4.0				10.8	12.8	10.8
5:15	Transportation Equipment	12.2	11.9	-6.0	15.7	0.2	18.1	23.6	19.2	22.2	7.2	1.0	14.1	10.9	48.3				4.7	35.8	5.4
5:16	Electrical Products	6.3	11.0	0.8	3.9	6.2	14.2	14.1	9.5	11.3	15.1	2.7	3.3	10.4	11.0				13.9	15.3	3.6
5:17	Non-Metallic Minerals	7.7	10.3	0.0	14.9	-0.7	14.4	4.1	12.3	10.9	14.2	1.6	8.7	13.1	41.2				13.9	7.8	-0.9
5:18	Petroleum & Coal	8.0	7.9	5.8	5.2	0.0	3.0	1.4	5.1	-4.2	16.6	10.5	5.6	14.8	48.7						
5:19	Chemical & Chemical Products	9.6	11.4	8.0	3.1	3.3	6.6	6.1	5.4	5.6	14.3	7.5	9.1	10.0	4.7				8.2	8.9	6.2
5:20	Miscellaneous Manufacturers	14.3	29.1	3.4	8.4	13.2	8.2	8.2	13.2	8.1	14.8	12.1	15.4	12.3	12.3				8.4	10.5	14.8

* All Employees for 1960 and 1961

Table 6 - Index of Industrial Production

Table 6 gives the industrial production index for Canada for the general manufacturing categories from 1961 to 1972 inclusive. This index provides another check on whether or not an industrial category is experiencing growth at the national level.

The years 1961 to 1966 use 1949 as the base year. From 1967 to the present the base year is 1961.

There is some discontinuity within this table because some industry categories did not start until 1967 (e.g. Knitting Mills) while others, such as Iron and Steel Products, ended in 1966. The 20 manufacturing categories used came from the most recent year (1972) and have been consistent (i.e. no gaps in the data) since 1967.

Table 6

Standard Industrial Classification Code

INDUSTRIAL PRODUCTION INDEXES

Source:
Statistics Canada

Standard Industrial Classification Code	Industries	1949 = 100					1961 = 100						
		1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
5:01	Food & Beverages	154.2	158.9	162.1	174.1	193.1	204.9	134.9	139.8	143.4	149.3	153.6	159.6
5:02	Tobacco Products	193.6	203.7	207.7	214.0	243.4	258.1	120.3	119.1	121.7	124.1	129.2	137.6
5:03	Pubber Industries	145.7	167.6	190.5	213.8	237.4	258.5	144.1	137.3	153.7	186.0	195.7	205.7
5:04	Leather Industries	123.8	126.7	127.0	130.9	135.2	137.9	104.5	113.0	108.6	89.3	87.2	89.5
5:05	Textile Industries	134.6	146.6	159.5	172.2	220.6	233.1	158.0	175.0	184.6	169.9	178.7	202.1
5:06	Knitting Mills							130.8	136.7	141.3	157.4	166.7	204.0
5:07	Clothing Industries	107.1	111.0	137.0	135.8	171.2	179.2	122.9	122.4	122.0	124.4	127.5	133.9
5:08	Wood Industries	139.6	151.5	159.0	165.1	181.7	189.2	136.6	143.9	149.6	146.8	165.2	192.1
5:09	Furniture & Fixtures							155.4	152.9	161.7	170.1	178.1	199.5
5:10	Paper & Allied Industries	153.4	159.1	164.3	179.0	198.3	216.1	129.8	136.7	152.0	139.0	138.5	150.2
5:11	Printing & Publishing	148.2	154.0	156.7	164.6	223.3	239.7	133.6	138.0	144.8	132.9	132.1	139.6
5:12	Primary Metal Industries							138.3	153.0	152.9	175.1	179.5	180.3
5:13	Metal Fabricating								162.9	169.9	186.1	191.0	203.6
5:14	Machinery Industries							205.3	198.7	221.1	221.1	217.3	221.1
5:15	Transportation Equipment	129.8	156.7	181.4	198.5	250.0	273.8	217.5	243.1	265.7	258.7	284.5	340.4
5:16	Electrical Products	182.6	212.9	223.5	239.5	319.2	368.2	182.0	192.0	210.6	200.3	207.1	227.2
5:17	Non-Metallic Minerals	220.2	240.9	243.0	277.6	286.9	296.3	135.9	139.1	142.8	146.7	158.5	168.0
5:18	Petroleum & Coal	258.8	272.8	296.0	304.2	345.9	371.6	135.0	143.2	149.0	155.9	165.2	182.4
5:19	Chemical & Chemical Products	222.1	233.2	249.1	279.0	344.7	377.5	156.0	165.2	172.3	204.6	210.9	220.9
5:20	Miscellaneous Manufacturers	213.0	237.2	246.6	261.9	407.3	448.3	153.8	161.8	181.5	211.6	226.4	222.0

Table 7 - Number of Establishments

In descending order (i.e. largest first) according to the number of establishments, the top manufacturing industries are ranked for Ontario for 1969 only. These same industries are similarly ranked for Toronto for 1967. In each case the remaining years are unranked. By comparing previous years' figures with the figure in the ranked year, any increase or decrease in the number of establishments by industry can be determined. This may give some indication of future trends, whether an industry will hold its rank in the future, or the possible direction of any change.

Table 7
Standard
Industrial
Classification

N U M B E R O F E S T A B L I S H M E N T S

Source:
Statistics Canada

ONTARIO
Ranked for 1969

Code	Industries	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
286	Commercial Printing	887	888	921	878	861	872	896	921	931	995
261	Household Furniture	622	637	675	664	690	694	699	696	692	702
129	Bakeries	843	800	825	802	794	766	740	731	687	649
308	Machine Shops	309	308	331	333	366	392	430	463	465	458
304	Metal Stamping, Pressing & Coating	268	291	315	316	341	357	379	385	402	409
306	Hardware, Tool & Cutlery Manufacturers	227	219	234	243	279	301	330	357	358	377
105	Dairy Products	746	692	665	645	618	574	527	464	401	368
123	Feed Manufacturers	697	445	420	406	397	360	352	356	337	316
251	Sawmills & Planing Mills	756	430	436	415	425	371	351	328	303	296
254	Sash, Door & Other Millwork Plants	401	302	290	265	250	248	247	264	263	280
165	Plastic Fabricators	127	140	150	156	194	207	229	245	261	267
289	Publishing & Printing	288	283	283	279	272	274	265	265	259	254
303	Ornamental & Architectural Metal	211	223	227	221	250	244	243	242	247	252
347	Concrete Products Manufacturers	254	230	235	237	223	216	220	208	204	201
287	Platemaking, Typesetting, Etc.	106	111	113	155	152	163	169	172	179	190
397	Signs & Displays Industries	187	188	188	185	183	185	187	197	194	190
288	Publishing Only	187	182	179	168	168	161	161	168	176	184
244	Women's Clothing	198	186	180	154	173	169	176	157	185	183
101	Slaughtering & Meat Processors	73	80	80	83	83	88	101	108	144	150
243	Men's Clothing	153	141	142	132	144	146	154	153	148	149
325	Motor Vehicle Parts & Accessories Manufacturers	89	99	105	110	123	127	140	143	143	139
112	Fruit & Vegetable Canners & Preservers	158	149	147	149	144	142	145	145	138	137

Table 7, Continued

Standard Industrial Classification Code		N U M B E R O F E S T A B L I S H M E N T S										
		O N T A R I O										
		Ranked for 1969										
		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
273	Paper Box & Bag Manufacturers	112	115	115	114	117	115	125	126	132	137	
335	Communications Equipment Manufacturers	94	90	96	95	97	99	112	119	128	136	
305	Wire & Wire Products Manufacturers	116	110	121	122	131	132	134	135	133	134	
382	Jewelry & Silverware Manufacturers	111	111	115	120	130	130	127	132	127	128	
141	Soft Drink Manufacturers	160	162	161	155	154	146	140	137	135	127	
336	Electrical Industrial Equipment Manufacturers	71	70	73	80	84	84	95	97	104	110	
246	Fur Goods Industries	161	129	117	113	118	109	108	105	99	103	
348	Ready-Mix Concrete Manufacturers	54	62	71	73	77	83	91	95	101	102	
174	Shoe Factories	87	85	89	86	87	85	79	77	81	83	
374	Pharmaceuticals & Medicines Manufacturers	87	78	75	79	84	77	84	80	79	81	
256	Wooden Box Factories	70	66	64	62	64	67	68	77	72	76	
324	Truck Body & Trailer Manufacturers	48	48	52	53	60	58	62	65	66	75	
375	Paint & Varnish Manufacturers	73	68	71	72	75	77	81	80	76	75	
221	Canvas Products Industries	72	71	68	72	69	70	67	69	70	69	
328	Boat Building & Repair	68	68	71	65	66	70	73	74	78	68	
302	Fabricated Structural Metal Industries	33	34	36	37	39	43	49	54	54	64	
378	Industrial Chemicals Manufacturers	55	53	56	56	57	58	60	60	62	62	
376	Soap & Cleaning Compounds Manufacturers	67	62	66	64	63	67	65	67	61	62	
131	Confectionary Manufacturers	90	75	77	74	68	68	67	60	62	61	

Table 7, Continued		N U M B E R O F E S T A B L I S H M E N T S							Source:	
Standard Industrial Classification Code	Industries	METROPOLITAN TORONTO							Statistics Canada	
		Ranked for 1967								
		1960	1961	1962	1963	1964	1965	1966	1967	
286	Commercial Printing	374	368			463	467	492	507	
261	Household Furniture	249	276			296	307	308	310	
129	Bakeries	230	230			240	233	225	225	
308	Machine Shops	105	113			140	155	183	210	
304	Metal Stamping, Pressing, Coating Industries	134	140			173	179	192	196	
165	Plastic Fabricators	56	75			122	133	144	160	
306	Hardware, Tool & Cutlery Manufacturers	82	88			118	128	145	156	
397	Signs & Displays Industries	87	97			102	106	110	115	
303	Ornamental & Architectural Metal	96	107			135	122	120	114	
254	Sash, Door & Other Millwork	62	70			84	88	85	92	
305	Wire & Wire Products Manufacturers	52	53			64	66	66	65	
289	Publishing & Printing	40	48			46	51	51	52	
347	Concrete Products Manufacturers	38	59			57	53	55	51	
375	Paint & Varnish Manufacturers	42	40			45	47	50	51	
325	Motor Vehicle Parts, Accessories Manufacturers	27	34			42		47	48	
374	Pharmaceuticals & Medicines Manufacturers	48	46			49		51	48	
105	Dairy Factories	24	31			42	38	40	34	
377	Toilet Preparations Manufacturers	33	34			29	30	30	29	
112	Fruit-Vegetables Canners & Preservers						27	28	29	
141	Soft Drink Manufacturers	20	21			24	26	25	25	
221	Canvas Products Industries	27	28			24	25	24	24	
298	Metal Rolling, Casting, Extruding	21	22			23		22	22	
324	Truck Body & Trailer Manufacturers	13	14			16	17	18	21	

Table 7, Continued		N U M B E R O F E S T A B L I S H M E N T S							Source:	
Standard Industrial Classification Code	Industries	METROPOLITAN TORONTO Ranked for 1967							Statistics Canada	
		1960	1961	1962	1963	1964	1965	1966	1967	
168	Rubber Industries	11	16				16	20	20	
123	Feed Manufacturers	10	26			22	20	18	17	
328	Boat Building & Repair		8			13	9	15	17	
348	Ready Mix Concrete Manufacturers					18	16	16	16	
301	Boiler & Plate Works	7	9			12	13	13	13	
218	Textile Dyeing & Finishing Plants	12	11			15		13	13	
353	Stone Products Manufacturers	10	12			16	39	14	13	
351	Clay Products Manufacturers	14	14			8	8	10	10	
337	Battery Manufacturers	6	11				7	9	9	
332	Major Appliances	12	12			11	10	10	9	
103	Poultry Processing	6	6			6	7	10	9	
256	Wooden Box Factories					10	10	7	8	
334	Household Radio & Television Manufacturers									
223	Cotton & Jute Bag Industries	7	8			8	7	6	7	
216	Carpet, Mat & Rug Industries	6	6			6	6	6	6	

Table 8 - Number of Employees

Table 8 gives the total number of production and related workers for specific manufacturing industries, ranked in descending order for Ontario for the year 1969 and for Toronto for the year 1967. For Toronto, the years 1960 and 1961 contain the number of all employees. Whether the number of workers employed in an industry is increasing or decreasing, as well as the rank of an industry in relation to other industries, can be determined from this table.

Table 8												
Standard Industrial Classification		N U M B E R O F E M P L O Y E E S A B S O L U T E N U M B E R S										Source: Statistics Canada
		(PRODUCTION & RELATED WORKERS)										
		ONTARIO - Ranked for 1969										
Code	Industries	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	
325	Motor Vehicle Parts & Accessories	11331	15343	16861	19595	23026	24882	26910	27017	30826	32746	
291	Iron & Steel Mills	21849	21823	23395	24609	26496	28155	29302	28398	28875	25595	
323	Motor Vehicle Manufacturers	19710	15220	17015	20426	23412	28140	27339	25006	23764	25293	
271	Pulp & Paper Mills	16615	16416	16358	16609	17162	17365	17945	17830	17537	17936	
335	Communications Equipment Manufacturers	6738	8489	10291	12036	12204	13744	16506	16432	15981	16789	
286	Commercial Printing	13220	12926	12928	13280	13005	13357	14315	14637	14521	14610	
304	Metal Stamping, Pressing & Coating	9096	9178	10564	11022	11433	12592	13404	12858	13455	14301	
336	Electrical Industrial Equipment Manufacturers	8834	8562	9556	10675	11197	11700	13185	12988	11967	12273	
162	Rubber Industries	10379	9598	10459	11489	11818	12472	13581	13058	11306	11902	
165	Plastic Fabricators	4442	3435	3904	4603	5283	5751	6829	7714	9817	10716	
261	Household Furniture Industries	8018	7552	7659	8044	8760	8981	10242	10088	9717	10189	
343	Men's Clothing	7970	8338	8400	8560	8994	9192	9900	9228	9470	9742	
321	Aircraft & Parts Manufacturers	5029	6428	6173	6878	8124	8342	11819	12010	10403	9433	
273	Paper Box & Bag Manufacturers	7037	7013	7164	7257	7648	8017	8507	8429	8477	8937	
305	Wire & Wire Products	5442	5489	5949	6453	7002	7817	8186	7921	8057	8614	
112	Fruit & Vegetable Canners & Preservers	8077	8011	8111	7724	8276	8941	9080	8488	8274	8126	
306	Hardware, Tool & Cutlery Manufacturers	4906	4995	5488	6023	7336	7652	7932	7600	7570	7889	
378	Industrial Chemicals Manufacturers	5945	6178	6473	6741	6763	6925	7295	7468	7623	7841	
101	Slaughtering & Meat Packing	7644	7302	7029	7264	7380	7345	7500	7591	7968	7592	
174	Shoe Factories	6994	7457	7843	7762	7749	7480	7323	6935	7177	7310	
294	Iron Foundries	4951	4615	4919	5582	5898	7441	8549	7694	6939	7251	
289	Publishing & Printing	7090	6924	6916	6901	6655	6782	6888	7195	7377	6910	
295	Smelting & Refining	9662	9322	8748	7132	8112	9250	9034	9323	9031	6876	
129	Bakeries	13247	6759	6764	6662	6824	6830	7140	7249	6927	6801	

Table 8, Cont'd. NUMBER OF EMPLOYEES ABSOLUTE NUMBERS
Standard Industrial Classification (PRODUCTION & RELATED WORKERS)

ONTARIO - Ranked for 1969

Code	Industries	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
311	Agricultural Implement Industries	7100	6208	6283	7289	7817	8490	8866	8492	6374	6478
244	Women's Clothing	5472	5060	5133	5196	5421	5469	6580	6349	6582	6316
356	Glass & Glass Products Manufacturers	3913	4128	4367	4494	4537	5151	5271	5486	5754	5661
302	Fabricated Structural Metal Industries	4791	4571	4787	4225	4977	6139	7292	6150	5500	5630
332	Major Appliances Manufacturers	5487	5496	5793	5935	6468	6795	6949	6721	5819	5593
251	Sawmills & Planing Mills	3765	4173	4271	4192	4458	4799	5357	5300	5256	5255
105	Dairy Products Industries	11759	5578	5664	5480	5459	5439	5373	5255	5064	4990
131	Confectionary Manufacturers	4352	4080	4257	4520	4419	4754	5073	5187	4893	4576
303	Ornamental & Architectural Metal Industries	3605	3642	4101	4326	4572	4766	4963	4730	4418	4562
334	Household Radio & Television Manufacturers	2237	2363	2969	3174	3554	3698	3613	3202	3529	4543
308	Machine Shops	2103	2082	2430	2617	2898	3344	3918	4228	4129	4350
254	Sash, Door & Other Millwork	3775	3068	3245	3238	3516	3623	3907	3995	4156	4216
347	Concrete Products Manufacturers	3214	2952	3512	3608	3997	4243	4069	3993	3701	3729
331	Small Electric Appliances Manufacturers	2285	2268	2579	2940	3077	3308	3843	3644	3484	3682
318	Office Store Machinery Manufacturers	2154	2120	2156	X	2045	2170	2527	3058	3038	3496
296	Aluminum Rolling, Casting & Extruding	2811	2844	2709	2857	2497	2499	2779	3155	3060	3425
374	Pharmaceuticals & Medicine Manufacturers	2641	2484	2439	2520	2511	2616	2850	2995	3159	3267
338	Electric Wire & Cable Manufacturers	2515	2459	2595	2627	2747	2921	3164	3304	3145	2976

Table 8, Cont'd. NUMBER OF EMPLOYEES ABSOLUTE NUMBERS
Standard Industrial Classification Code Industries
(PRODUCTION & RELATED WORKERS)
METROPOLITAN TORONTO*

Ranked for 1967

	1960	1961	1962	1963	1964	1965	1966	1967
286 Commercial Printing	11781	11823			8278	8498	9158	9493
304 Metal Stamping, Pressing, Etc.	6315	6608			5678	6055	6546	6494
162 Rubber Industries	4288	4010				3963	4344	4182
129 Bakeries	6575	6333			3649	3756	3879	4174
165 Plastic Fabricators	1357	2039			2883	3160	3483	4160
325 Motor Vehicle Parts & Accessories	2239	2366			3056		3833	4118
261 Household Furniture	3432	3630			3446	3376	3611	3732
289 Publishing & Printing	7181	7775			7234	3323	3452	3591
303 Ornamental & Architectural	2702	2979			2670	2647	2770	2665
332 Major Appliances Manufacturers	3471	3036			2378	2671	2658	2630
306 Hardware, Tool & Cutlery Manufacturers	1847	1925			2466	2446	2508	2422
305 Wire & Wire Products	1493	1945			1951	2269	2306	2272
308 Machine Shops	1077	1230			1284	1514	1897	2195
374 Pharmaceuticals & Medicine Manufacturers	2227	2697			1776		1967	2102
397 Signs & Displays	1330	1480			1447	1452	1670	1838
254 Sash Doors & Other Millwork	1000	1308			1446	1671	1615	1768
334 Manufacturers of Household Radio & TV	2163	2486			1842	1847	1733	1669
338 Manufacturers of Electric Wire & Cable						1378	1493	1561
375 Paint & Varnish Manufacturers	2196	2066			1317	1479	1434	1532
347 Concrete Products Manufacturers	1108	1305			1828	2007	1763	1516
377 Manufacturers of Toilet Preparations	1170	1286			1022	1091	1104	1168
112 Fruit, Vegetable Canners & Preservers						1090	1117	1096
324 Truck Body & Trailer Manufacturers	669	832			923	875	886	939
298 Metal Rolling, Casting & Extruding	933	990			864		948	903
105 Dairy Factories	3161	3201			851	862	837	838

Table 8, Cont'd. NUMBER OF EMPLOYEES ABSOLUTE NUMBERS
(PRODUCTION & RELATED WORKERS)

METROPOLITAN TORONTO*

Ranked for 1967

Industries	1960	1961	1962	1963	1964	1965	1966	1967
351 Clay Products Manufacturers	269	789			704	724	823	799
337 Battery Manufacturers							803	779
141 Soft Drink Manufacturers	1192	1221			741	741	713	775
348 Ready-Mix Concrete Manufacturers	630	674			735	868	851	716
216 Carpet, Mat & Rug Industries								493
301 Boiler & Plate Works	559	506			410	462	621	485
271 Pulp & Paper Mills	1461	1444			667		503	432
221 Canvas Products Industries	427	412			362	369	405	430
123 Feed Manufacturers	408	557			352	395	409	425
143 Distilleries	365	368			244	298	340	345
218 Textile Dyeing & Finishing Plants	191	237			276		295	329
103 Poultry Processors	111	301			99	128	191	107
328 Boat Building & Repair		91			117	124	155	168
292 Steel Pipe & Tube Mills							117	166

*All employees for 1960 and 1961

Table 9 - Production Employees (% Change)

Based on Table 8, Table 9 provides the percentage change for each year in numbers of production employees clarifying both the direction and size of annual changes.

The list of industries in Table 9 has the same order as in Table 8.

Table 9

PRODUCTION EMPLOYEES % CHANGE

ONTARIO

Standard Industrial Classification Code	Industries	1961	1962	1963	1964	1965	1966	1967	1968	1969
325	Motor Vehicle Parts & Accessories	35.4	9.8	16.2	17.5	8.0	8.1	0.3	14.0	6.2
291	Iron & Steel Mills	0.2	7.2	5.1	7.6	6.2	4.0	3.1	1.6	-11.4
323	Motor Vehicle Manufacturers	-22.8	11.7	20.0	14.6	20.1	-2.9	-8.6	-5.0	6.4
271	Pulp & Paper Mills	-1.2	-0.4	1.5	3.3	1.1	3.3	-0.7	-1.7	2.2
335	Communications Equipment Manufacturers	25.9	21.2	16.9	1.3	12.6	20.0	-0.5	-2.8	5.0
286	Commercial Printing	-2.3	0.0	2.7	-2.1	2.7	7.1	2.2	-0.8	0.6
304	Metal Stamping, Pressing, Coating	0.9	15.1	4.3	3.7	10.1	6.4	-4.1	4.6	6.2
336	Manufacturers of Electrical Industrial Equipment	-3.1	11.6	11.7	4.8	4.4	12.6	-1.5	-7.9	2.5
162	Rubber Industries	-7.6	8.9	9.8	2.8	5.5	8.8	-3.9	-13.5	3.5
165	Plastic Fabricators	-22.7	13.6	17.9	14.7	8.8	18.7	12.9	27.2	9.1
261	Household Furniture Industries	-5.9	1.4	5.0	8.9	2.5	14.0	-1.6	-3.7	4.8
243	Men's Clothing	4.6	0.7	1.9	5.0	2.2	8.8	-6.8	2.6	2.8
321	Aircraft & Parts Manufacturers	27.8	-4.0	11.4	18.1	2.6	41.6	1.6	-13.4	-9.4
273	Paper Box & Bag Manufacturers	-0.4	2.1	1.2	5.3	4.8	6.1	-1.0	0.5	5.4
305	Wire & Wire Products	0.8	8.3	8.4	8.5	11.6	4.7	-3.3	1.7	6.9
112	Fruit, Vegetables Canners & Preservers	-0.9	1.2	-4.8	7.1	8.0	1.5	-6.6	-2.6	-1.8
306	Hardware, Tool & Cutlery Manufacturers	1.8	9.8	9.7	21.7	4.3	3.6	-4.2	-0.4	4.2
378	Manufacturers of Industrial Chemicals	3.9	4.7	4.1	0.3	2.3	5.3	2.3	2.0	2.8
101	Slaughtering & Meat Packing	-4.5	-3.8	3.3	1.5	-0.5	2.1	1.2	4.9	-4.8
174	Shoe Factories	6.6	5.1	-1.1	-0.2	-3.5	-2.1	-5.3	3.4	1.8
294	Iron Foundries	-6.8	6.5	13.4	5.6	26.1	14.8	-10.1	-9.9	4.4
289	Publishing & Printing	-2.4	-0.2	-0.3	-3.6	1.9	1.5	4.4	2.5	-6.4

Table 9, Cont'd.

PRODUCTION EMPLOYEES % CHANGE

METROPOLITAN TORONTO*

Standard Industrial Classification Code	Industries	1961	1962	1963	1964	1965	1966	1967
286	Commercial Printing	0.3				2.6	7.7	3.6
304	Metal Stamping, Pressing, Etc.	4.6				6.6	8.1	- 0.8
162	Rubber Industries	- 6.5					9.6	- 3.8
129	Bakeries	- 3.7				2.9	3.2	7.6
165	Plastic Fabricators	50.2				9.6	10.2	19.4
325	Motor Vehicle Parts & Accessories	5.6						7.4
261	Household Furniture	5.7			- 2.1	6.9		3.3
289	Publishing & Printing	8.2					3.8	4.0
303	Ornamental & Architectural	10.2			- 0.9	4.6		- 3.8
332	Manufacturers of Major Appliances	-12.6			12.3	- 0.5		- 1.1
306	Hardware, Tool & Cutlery Manufacturers	4.2			- 0.9	2.5		- 3.5
305	Wire & Wire Products	30.2			16.2	1.6		- 1.5
308	Machine Shops	14.2			17.9	25.2		15.7
374	Manufacturers of Pharmaceuticals & Medicine	21.1						6.8
397	Signs & Displays	11.2				0.3	15.0	10.0
254	Sash, Doors & Other Millwork	30.8				15.5	- 3.4	9.4
334	Manufacturers of Household Radio & TV	14.9				0.2	- 6.2	- 3.7
338	Manufacturers of Electric Wire & Cable						8.3	4.5
375	Paint & Varnish Manufacturers	- 6.0				12.3	- 3.1	6.8
347	Concrete Products Manufacturers	17.7				9.7	-12.2	-14.1
377	Manufacturers of Toilet Preparations	16.1				6.7	1.1	5.7
112	Fruit, Vegetables Canners & Preservers						2.4	- 1.9

* All employees for 1960 and 1961

Table 9, Cont'd.
Standard Industrial Classification Industries

P R O D U C T I O N E M P L O Y E E S % C H A N G E		1961	1962	1963	1964	1965	1966	1967
METROPOLITAN TORONTO*								
324	Truck Body & Trailer Manufacturers	24.3				- 5.3	1.2	5.9
298	Metal Rolling, Casting, Extruding	6.1						- 4.8
105	Dairy Factories	1.2				1.2 -	3.0	0.1
351	Clay Products Manufacturers	193.3				2.8	13.6 -	3.0
337	Battery Manufacturers							- 3.0
141	Soft Drink Manufacturers	2.4				0.0 -	3.8	8.6
348	Ready-Mix Concrete Manufacturers	6.9				18.0 -	2.0	-15.9
216	Carpet, Mat & Rug Industries ?							
301	Boiler & Plate Works	- 9.5				12.6	34.4	-22.0
271	Pulp & Paper Mills	- 1.2						-14.2
221	Canvas Products Industries	- 3.6				1.9	9.7	6.1
123	Feed Manufacturers	36.5				12.2	3.5	3.9
143	Distilleries	0.8				22.1	14.0	1.4
218	Textile, Dyeing & Finishing Plants	24.0						11.5
103	Poultry Processors	171.1				29.2	49.2 -	2.1
328	Boat Building & Repair					5.9	25.0	8.3
292	Steel Pipe & Tube Mills							41.8

* All employees for 1960 and 1961.

Table 10 - Wages

Table 10 displays the wages (rounded to the nearest million) paid to production and related workers (except 1960 and 1961 for Toronto where all employees are included) ranked in descending order for Ontario in 1969 and for Toronto in 1967. The remaining years are unranked.

Standard
Industrial
Classification
Code

Industries

W A G E S & S A L A R I E S
(P R O D U C T I O N & R E L A T E D W O R K E R S)
A B S O L U T E N U M B E R S

(MILLIONS OF DOLLARS)

Source:
Statistics Canada

ONTARIO

Ranked for 1969

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
325 Motor Vehicle Parts & Accessories Manufacturers	51.1	70.5	83.2	101.0	124.8	145.6	151.3	157.0	208.3	235.0
323 Motor Vehicle Manufacturers	100.6	80.9	102.7	132.3	147.7	198.7	192.4	183.2	208.0	226.2
291 Iron & Steel Mills	115.4	120.3	132.1	142.7	157.5	173.7	187.0	190.5	205.6	194.8
271 Pulp and Paper Mills	80.5	82.3	84.9	88.0	93.6	98.0	112.0	116.0	123.0	135.8
286 Commercial Printing	51.9	52.6	55.1	59.2	62.5	67.0	74.8	79.8	84.8	92.1
335 Communications Equipment Manufacturers	22.6	29.0	35.5	44.8	47.8	55.8	69.9	73.5	78.4	88.4
304 Metal Stamping, Pressing & Coating	38.1	39.7	46.4	49.2	52.6	59.4	66.9	68.4	77.1	87.4
162 Rubber Industries	42.8	41.6	48.5	52.7	57.9	64.1	71.8	73.7	68.5	78.0
336 Manufacturers of Electrical Industrial Equipment	39.2	38.8	45.4	51.2	56.9	61.3	70.7	69.4	70.3	75.1
321 Aircraft & Parts Manufacturers	21.6	28.4	26.7	32.9	42.4	42.4	70.3	76.4	69.5	73.9
378 Manufacturers of Industrial Chemicals	30.8	33.0	35.5	37.9	39.3	41.9	47.6	51.7	57.0	63.8
305 Wire & Wire Products Manufacturers	23.6	24.6	28.0	30.3	35.1	39.3	41.9	42.9	47.7	54.5
273 Paper Box & Bag Manufacturers	24.8	26.3	27.9	29.4	32.6	36.0	39.7	42.1	45.7	51.7
165 Plastic Fabricators	8.0	10.4	12.2	14.8	18.0	20.8	26.8	32.2	44.2	51.5
101 Slaughtering & Meat Packing	32.3	30.8	31.2	33.0	35.8	37.3	39.3	43.9	47.9	50.2
306 Hardware, Tool & Cutlery Manufacturers	18.9	20.2	22.7	25.8	32.1	34.9	40.5	42.4	44.4	50.0
289 Publishing & Printing	34.3	34.3	36.4	36.5	36.7	38.9	40.6	44.5	48.0	49.1
294 Iron Foundries	19.8	18.7	21.0	24.9	27.9	40.6	47.0	42.6	42.5	48.9
311 Agricultural Implement Industries	32.8	28.7	31.5	39.4	45.0	48.0	54.5	54.8	43.2	48.6
261 Household Furniture Industries	24.9	24.2	25.3	27.6	31.3	33.7	41.0	41.7	42.8	48.4
295 Smelting & Refining	45.4	45.1	41.9	35.1	40.1	49.4	47.8	59.6	60.5	44.2
302 Fabricated Structural Metal Industries	22.7	22.5	24.5	24.8	27.3	37.3	46.7	39.8	37.7	43.9
356 Glass & Glass Products Manufacturers	16.1	17.1	19.0	20.4	21.8	26.0	28.3	31.9	36.0	40.5

Table 10, Cont'd.

W A G E S & S A L A R I E S													Source: Statistics Canada	
Standard Industrial Classification Code		ABSOLUTE NUMBERS												
		(MILLIONS OF DOLLARS)												
		ONTARIO												
		Ranked for 1969												
		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969			
112	Fruit & Vegetable Canners & Preservers	21.7	22.3	23.6	23.5	26.7	30.8	33.0	33.5	35.4	36.9			
243	Men's Clothing	19.5	21.4	22.3	23.5	25.7	27.6	31.1	30.4	33.4	36.8			
129	Bakeries	42.9	21.4	22.8	23.6	25.5	28.0	29.3	31.0	32.7	35.3			
332	Manufacturers of Major Appliances	22.6	22.6	24.7	26.7	30.0	40.0	34.8	36.0	32.3	34.3			
174	Shoe Factories	17.7	19.3	20.7	21.4	22.6	22.4	23.7	24.4	26.8	29.0			
105	Dairy Products Industries	44.5	19.7	20.5	20.8	21.7	22.8	24.4	25.5	26.6	28.5			
308	Machine Shops	7.9	8.0	9.7	11.0	13.0	16.0	19.9	23.3	23.9	28.0			
303	Ornamental & Architectural Metal Industries	13.8	13.8	16.2	18.3	20.3	22.1	24.4	25.0	24.7	27.6			
244	Women's Clothing	14.2	14.3	15.0	15.3	16.6	19.4	22.0	22.5	24.2	24.9			
251	Sawmills & Planing Mills	10.4	11.9	13.7	13.7	15.0	16.9	20.0	21.6	22.9	24.8			
347	Concrete Products Manufacturers	11.7	11.1	14.0	14.5	17.1	19.1	20.7	21.1	21.1	23.1			
318	Office Store Machinery Manufacturers	9.6	10.1	10.4	X	11.4	12.4	15.1	17.8	19.0	22.3			
296	Aluminum Rolling, Casting & Extruding	11.8	12.8	12.2	13.0	12.3	12.8	15.2	17.6	18.4	22.0			
254	Sash, Door & Other Millwork Plants	11.7	9.9	10.8	11.0	12.5	14.2	16.1	17.3	19.0	21.8			
131	Confectionary Manufacturers	12.1	12.3	13.2	14.4	14.8	16.6	18.8	20.5	20.4	21.0			
334	Manufacturers of Household Radio & Television	7.2	9.0	10.4	10.9	12.6	14.0	14.5	13.4	16.2	20.8			
287	Platemaking, Typesetting, Etc.	13.3	13.5	13.6	13.1	13.7	14.5	15.9	16.9	18.5	20.0			
365	Petroleum Refineries	12.5	12.5	12.1	12.3	12.9	13.5	15.5	17.1	18.1	19.6			
338	Manufacturers of Electric Wire & Cable	10.4	10.9	11.9	12.7	13.3	14.7	16.3	18.3	19.5	19.6			
292	Steel Pipe & Tube Mills	9.8	10.2	11.1	11.8	14.1	15.4	15.5	15.4	18.5	19.3			

Table 16, Cont'd.

W A G E S & S A L A R I E S

Standard

ABSOLUTE NUMBERS

Industrial

METROPOLITAN TORONTO *

Ranked for 1967

Code Industries

MILLIONS OF DOLLARS

Source:
Statistics Canada

	1960	1961	1962	1963	1964	1965	1966	1967
286 Commercial Printing	35.5	32.4			41.9	44.8	50.3	54.2
304 Metal Stamping, Pressing, Etc.	28.8	29.3			26.5	29.2	33.1	34.8
162 Rubber Industry	19.9	19.2				21.9	24.3	25.7
289 Publishing & Printing	40.1	44.2			20.4	21.7	22.5	24.2
325 Motor Vehicle Parts & Accessories	9.2	10.1			13.7		19.0	20.6
129 Bakeries	23.7	23.1			14.4	16.3	17.1	19.0
165 Plastic Fabricators	4.5	6.9			9.7	11.4	13.2	17.2
261 Household Furniture	12.4	13.4			13.1	13.5	15.4	16.5
332 Manufacturers of Major Appliances	15.6	14.0			11.4	14.0	14.3	15.1
306 Hardware, Tool & Cutlery Manufacturers	8.2	8.8			10.5	11.3	13.1	13.8
303 Ornamental & Architectural Metal	11.6	13.3			11.8	12.4	14.0	13.6
308 Machine Shops	4.6	5.0			5.9	7.4	10.1	12.4
305 Wire & Wire Products	6.7	9.1			9.5	10.9	11.2	11.6
397 Signs & Displays	5.6	6.2			6.2	6.5	7.9	9.3
374 Manufacturers of Pharmaceuticals & Medicines	8.6	10.9			6.7		8.3	9.3
347 Concrete Products Manufacturers	4.7	5.5			8.2	9.3	9.3	8.6
254 Sash Door & Other Millwork	3.7	5.2			5.9	7.2	7.4	8.3
375 Paint & Varnish Manufacturers	9.9	9.8			6.1	7.3	7.4	8.2
338 Manufacturers of Electric Wire & Cable						6.9	6.9	7.9
334 Manufacturers of Household Radio & Television	9.1	10.7			6.5	7.0	7.2	7.4
324 Truck Body & Trailer Manufacturers	2.8	3.7			4.0	4.3	4.8	5.4
112 Fruit, Vegetable Canners & Preservers						4.7	5.1	5.3
348 Ready-Mix Concrete Manufacturers	3.2	3.7			4.7	5.7	5.7	5.1
105 Dairy Factories	13.9	14.4			4.0	4.1	4.3	4.6

Table 10, Cont'd.

W A G E S & S A L A R I E S

Standard

Industrial

Classification

Code Industries

ABSOLUTE NUMBERS

(MILLIONS OF DOLLARS)

METROPOLITAN TORONTO*

Ranked for 1967

Source:
Statistics Canada

	1960	1961	1962	1963	1964	1965	1966	1967
298 Metal Rolling, Casting, Extruding	4.3	4.6			3.8		4.7	4.5
337 Battery Manufacturers						3.5	4.0	4.4
377 Manufacturers of Toilet Preparations	4.0	4.6			3.2	3.5	3.9	4.3
351 Clay Products Manufacturers	1.1	3.2			3.2	3.5	4.3	4.3
141 Soft Drink Manufacturers	5.5	5.7			3.1	3.4	3.4	3.7
301 Boiler & Plate Works	2.6	2.5			1.9	2.4	3.6	2.8
271 Pulp & Paper Mills	9.4	9.7			3.7		3.0	2.8
123 Feed Manufacturers	1.8	2.4			1.6	1.7	2.1	2.3
216 Carpet, Mat & Rug Industries								2.0
143 Distilleries	1.7	1.8			1.1	1.5	1.8	2.0
221 Canvas Products Industries	1.2	1.1			1.0	1.2	1.3	1.4
218 Textile Dyeing & Finishing Plants	0.7	0.9			1.0		1.1	1.3
328 Boat Building & Repair		0.3			0.5	0.5	0.7	0.9
292 Steel Pipe & Tube Mills							0.5	0.7
256 Wooden Box Factories					0.9	1.0	1.0	0.7
103 Poultry Processors	0.5	0.5			0.4	0.5	0.7	0.7

* All Employees for 1960 & 1961

Table 11 - Wages (% Change)

Based on Table 10, Table 11 converts the annual changes to percentage terms, identifying the order and direction of these changes.

The order of the industries in Table 11 is that developed for the ranking in Table 10.

Table 11
Standard
Industrial
Classification
Code Industries

W A G E S & S A L A R I E S & C H A N G E
(PRODUCTION & RELATED WORKERS)
ONTARIO

Source:
Statistics Canada

	1961	1962	1963	1964	1965	1966	1967	1968	1969
325 Motor Vehicle Parts & Accessories Manufacturers	37.9	18.0	21.3	23.5	16.6	3.9	3.7	32.6	12.8
323 Motor Vehicle Manufacturers	-19.6	26.9	28.8	11.6	34.5	-3.2	-4.8	13.5	8.7
291 Iron & Steel Mills	4.2	9.8	8.0	10.3	10.2	7.6	1.8	7.9	-5.3
271 Pulp & Paper Mills	2.2	3.1	3.6	6.3	4.7	14.2	3.5	6.0	10.4
286 Commercial Printing	1.3	4.7	7.4	5.5	7.2	11.6	6.6	6.2	8.6
335 Communications Equipment Manufacturers	28.3	22.4	26.1	6.6	16.7	25.2	5.1	6.6	12.7
304 Metal Stamping, Pressing & Coating	4.1	16.8	6.0	6.9	12.9	12.6	2.2	12.7	13.3
162 Rubber Industries	-2.9	16.5	8.6	9.8	10.7	12.0	2.6	-3.1	13.8
336 Manufacturers of Electrical Industrial Equipment	1.1	17.0	12.7	11.1	7.7	15.3	-1.9	1.2	6.8
321 Aircraft & Parts Manufacturers	31.4	-6.0	23.2	28.8	0.0	65.8	8.6	-9.1	6.3
378 Manufacturers of Industrial Chemicals	7.1	7.5	6.7	3.6	6.6	13.6	8.6	10.2	11.9
305 Wire & Wire Products Manufacturers	4.2	13.8	8.2	15.8	11.9	6.6	2.3	11.1	14.2
273 Paper Box & Bag Manufacturers	6.0	6.0	5.3	10.8	10.4	10.2	6.0	8.5	13.1
165 Plastic Fabricators	30.0	17.3	21.3	21.6	15.5	28.8	20.1	37.2	16.5
101 Slaughtering & Meat Packing	-4.7	1.2	5.7	8.4	4.1	5.3	11.7	9.1	4.8
306 Hardware, Tool & Cutlery Manufacturers	6.8	12.3	13.6	24.4	8.7	16.0	4.6	4.7	12.6
289 Publishing & Printing	0.0	6.1	0.2	0.5	5.9	4.3	9.6	7.8	2.2
294 Iron Foundries	-5.6	12.2	18.5	12.0	45.5	15.7	-9.4	-0.3	15.0
311 Agricultural Implement Industries	-12.5	9.7	25.0	14.2	6.6	13.5	0.5	-21.2	12.5
261 Household Furniture Industries	-2.9	4.5	9.0	13.4	7.6	21.6	1.7	2.6	13.0
295 Smelting & Refining	-0.7	-7.1	-16.3	14.2	23.1	-3.3	24.6	1.5	-27.0
302 Fabricated Structural Metal Industries	-0.9	8.8	1.2	10.0	36.6	25.2	-14.8	-4.3	16.4

Table 11
Standard
Industrial
Classification

W A G E S & S A L A R I E S & C H A N G E

(PRODUCTION & RELATED WORKERS)

ONTARIO

Source:
Statistics Canada

Code	Industries	1961	1962	1963	1964	1965	1966	1967	1968	1969
356	Glass & Glass Products Manufacturers	6.2	11.1	7.3	6.8	19.2	8.8	12.7	12.8	12.5
112	Fruit & Vegetable Canners & Preservers	2.7	5.8	-0.5	13.6	15.3	7.1	1.5	5.6	4.2
243	Men's Clothing	9.7	4.2	5.3	9.3	7.3	12.6	-2.3	9.8	10.1
129	Bakeries	-50.2	6.5	3.5	8.0	9.8	4.6	5.8	5.4	7.9
332	Manufacturers of Major Appliances	0.0	9.2	8.0	12.3	33.3	-13.0	3.4	-10.3	6.1
174	Shoe Factories	9.0	7.2	3.3	5.6	-0.9	5.8	2.9	9.8	8.2
105	Dairy Products Industries	-55.8	4.0	1.4	4.3	5.0	7.0	4.5	4.3	7.1
308	Machine Shops	1.2	21.2	13.4	18.1	23.0	24.3	17.0	2.5	17.1
303	Ornamental & Architectural	0.0	17.3	12.9	10.9	8.8	10.4	2.4	-1.2	11.7
244	Women's Clothing	0.7	4.8	2.0	8.4	16.8	13.4	2.2	7.5	2.8
251	Sawmills & Planing Mills	14.4	15.1	0.0	9.4	12.6	18.3	8.0	6.0	8.2
347	Concrete Products Manufacturers	-5.2	26.1	3.5	17.9	11.6	8.3	1.9	0.0	9.4
318	Office Store Machinery Mfrs.	5.2	2.9			8.7	21.7	17.8	6.7	17.3
296	Aluminum Rolling, Casting & Extruding	8.4	-4.7	6.5	-5.4	4.0	18.7	15.7	4.5	19.5
254	Sash, Door & Other Millwork Plants	-15.4	9.0	1.8	13.6	13.6	13.3	7.4	9.8	14.7
131	Confectionary Manufacturers	1.6	7.3	9.0	2.7	12.1	13.2	9.0	-0.5	2.9
334	Manufacturers of Household Radio & T.V.	25.0	15.5	4.8	15.5	11.1	3.5	-7.6	20.8	28.3
287	Platemaking, Typesetting, Etc.	1.5	0.7	-3.7	4.5	5.8	9.6	6.2	9.4	8.1
365	Petroleum Refineries	0.0	-3.2	1.6	4.8	4.6	14.8	10.3	5.8	8.2
338	Manufacturers of Electric Wire and Cable	4.8	9.1	6.7	4.7	10.5	10.8	12.2	6.5	0.5
292	Steel Pipe & Tube Mills	4.0	8.8	6.3	19.4	9.2	0.6	-0.7	20.1	4.3

Table 11
Standard
Industrial
Classification
Code

W A G E S & S A L A R I E S
(PRODUCTION & RELATED WORKERS)
METROPOLITAN TORONTO

Source:
Statistics Canada

Industries	1961	1962	1963	1964	1965	1966	1967	1968	1969
286 Commercial Printing	-8.8				6.9	12.2	7.7		
304 Metal Stamping, Pressing, Etc.	1.7				10.1	13.3	5.1		
162 Rubber Industries	-3.6					10.9	5.7		
289 Publishing & Printing	10.2				6.3	3.6	7.5		
325 Motor Vehicle Parts and Accessories	9.7						8.4		
129 Bakeries	-2.6				13.1	4.9	11.1		
165 Plastic Fabricators	53.3				17.5	15.1	30.3		
261 Household Furniture	8.0				3.0	14.0	7.1		
332 Manufacturers of Major Appliances	-10.3				22.8	2.1	5.5		
306 Hardware, Tool, & Cutlery Mfrs.	7.3				7.6	15.9	5.3		
303 Ornamental & Architectural	14.6				5.0	12.9	-2.9		
308 Machine Shops	8.6				25.4	36.4	22.7		
305 Wire & Wire Products	35.8				14.7	2.7	3.5		
397 Signs & Displays	10.7				4.8	21.5	17.7		
374 Manufacturers of Pharmaceuticals & Medicines	26.7						12.0		
347 Concrete Products Manufacturers	17.0				13.4	0.0	-7.6		
254 Sash, Door & Other Millwork Plants	40.5				22.0	2.7	12.1		
375 Paint & Varnish Manufacturers	-1.1				19.6	1.3	10.8		
338 Manufacturers of Electric Wire & Cable						0.0	14.4		
334 Manufacturers of Household Radio & T.V.	17.5				7.6	2.8	2.7		

Table 11
Standard Industrial Classification

W A G E S & S A L A R I E S & C H A N G E
(PRODUCTION & RELATED WORKERS)
METROPOLITAN TORONTO

Source:
Statistics Canada

Code	Industries	1961	1962	1963	1964	1965	1966	1967	1968	1969
324	Truck Body & Trailer Manufacturers	32.1				7.5	11.6	12.5		
112	Fruit, Vegetable Canners & Preservers						8.5	3.9		
348	Ready-Mix Concrete Manufacturers	15.6				21.2	0.0	-10.6		
105	Dairy Factories	3.5				2.5	4.8	6.9		
298	Metal Rolling, Casting, Extruding	6.9						-4.3		
337	Battery Manufacturers							10.0		
377	Manufacturers of Toilet Preparations	15.0				9.3	11.4	10.2		
351	Clay Products Manufacturers	90.9				9.3	22.8	0.0		
141	Soft Drink Manufacturers	3.6				9.6	0.0	8.8		
301	Boiler & Plate Works	-3.9				26.3	50.0	-22.3		
271	Pulp & Paper Mills	3.1						-6.7		
123	Feed Manufacturers	33.3				6.2	23.5	9.5		
216	Carpet, Mat & Rug Industries									
143	Distilleries	5.8				36.3	20.0	11.1		
221	Canvas Products Industries	-8.4				20.0	8.3	7.6		
218	Textile Dying & Finishing Plants	27.1						18.1		
328	Boat Building & Repair					15.2	35.8	19.4		
292	Steel Pipe & Tube Mills							48.0		
256	Wooden Box Factories					7.6	0.0	-29.6		

*All employees for 1960 and 1961

Table 12 - Industrial Production Index

Table 12 provides a ranking of the industrial production index for specific manufacturing industries for Canada for the year 1972. The remaining years are unranked.

For a number of industries data for 1967 to 1972 only are available. Prior to 1967, these industries were either incorporated under another industry title or were too small to be rated.

1949 equals 100 is the base year until 1966, after which 1961 equals 100 becomes the base year.

Table 12
Standard
Industrial
Classification
Code

I N D E X O F I N D U S T R I A L P R O D U C T I O N

CANADA

(Ranked for 1972)

1949=100

1961=100

Industries

Source:
Statistics Canada

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
323-4 Motor Vehicle & Truck Body & Trailer Manufacturers	157.3	206.9	257.6	276.1	347.6	372.3	265.2	322.4	369.2	358.1	416.7	516.7
325 Motor Vehicle Parts & Accessories	121.3	146.6	179.5	215.6	317.2	345.6	207.4	242.9	253.4	259.2	308.0	355.5
326 Railroad Rolling Stock	42.9	41.5	41.1	47.3	62.6	60.5	279.5	249.0	245.3	213.6	239.5	345.9
334 Manufacturers of Household Radio & T.V.							192.8	230.4	271.1	181.6	215.6	324.8
143 Distilleries	200.1	210.0	220.3	242.5	284.8	312.9	166.4	175.9	193.9	214.4	223.0	254.3
201 Synthetic Textile Mills	219.5	243.6	281.0	306.8	391.3	440.5	203.9	241.0	258.5	216.9	231.2	248.3
292 Steel Pipe & Tube Mills							131.3	174.4	166.6	197.6	207.1	246.5
378 Manufacturers of Industrial Chemicals							169.6	180.9	189.1	238.8	250.7	243.9
305 Wire & Wire Products							147.3	165.4	159.9	186.9	215.2	234.9
348 Ready-Mix Concrete Manufacturers							153.8	173.4	171.3	195.4	233.7	233.8
336 Manufacturers of Electrical Industrial Equipment	132.0	149.8	154.3	161.0	241.6	272.0	184.2	175.2	185.7	218.7	221.4	231.2
304 Metal Stamping, Pressing & Coating Industries	141.0	157.3	156.9	164.3	274.2	289.1	164.3	171.9	179.6	191.1	200.0	224.2
311-8 Machinery Industries	133.4	149.1	160.2	179.2	248.1	275.4	205.3	198.7	212.6	221.1	217.3	221.1
335 Communications Equipment Mfrs.	428.9	524.1	546.9	584.0	895.1	1051.6	214.9	238.4	260.4	240.3	228.2	221.0
294 Iron Foundries	144.3	135.5	151.1	180.7	218.9	213.0	144.1	139.4	139.9	164.5	179.8	213.2
332 Manufacturers of Major Appliances	171.3	198.4	221.6	233.8	301.9	352.5	160.3	182.9	199.2	137.2	182.7	212.9
301 Boiler & Plate Works							173.9	171.8	177.1	198.0	202.6	207.4
251 Sawmills & Planing Mills	146.7	161.1	172.1	179.3	182.8	187.3	140.7	151.7	154.5	156.5	177.1	207.3
252 Veneer & Plywood Mills	295.4	329.8	358.8	399.3	403.8	428.1	147.8	154.7	155.7	140.9	158.8	207.3
162 Rubber Industries	145.7	167.6	190.5	213.8	237.4	258.5	144.1	137.3	153.7	186.0	195.7	205.7
231-9 Knitting Mills							130.8	136.7	141.3	157.4	166.7	204.0
181-9 Textile Industries	134.6	146.6	159.5	172.2	220.6	233.1	158.0	175.0	184.6	169.9	178.7	203.1

Analysis

An examination of each table determined that the data for Ontario would be the primary source of the conclusions reached. However, the data for Canada given in Tables 6 and 12 would be used exclusively because they were the only information on productivity available and useful for the purposes of this paper. The data for Canada and Toronto in tables other than 6 or 12 are provided for general reference. Due to completeness and reliability, the information provided for Canada is weighed more heavily than that provided for Toronto.

The data for Toronto has several problems which make it less useful. Apart from being limited, disjointed, and inconsistent for certain industries or manufacturing categories, it may also be biased. Nearly 60,000 people enter the Toronto area each year and create an ever expanding market for commodities of all kinds. Whether they attract industry, or are attracted by industry, such a rapidly expanding market assures that almost any industry located here experiences growth. For example, the number of establishments involved in the Wood Products industries declined in Canada (between 1967 and 1971) from 3,793 to 3,164 and declined in Ontario (between 1960 and 1969) from 1361 to 777. Yet, between 1960 and 1967 the Wood Products industries in Toronto rose from 96 to 129 establishments. Toronto, as one of the most rapidly growing cities in North America encourages the expansion of firms on a purely local scale, while the industry as a whole may be declining. Therefore, the data for Toronto may not be reliable.

Table 1 - Number of Firms

A comparison of the numbers of firms in the manufacturing category for Ontario for the years 1960 to 1969 reveals that the following manufacturing categories displayed an increase in the number of establishments: paper and allied industries*, printing and publishing*, metal fabricating*, machinery industries*, transportation equipment manufacturers*, electrical products*, petroleum and coal*, rubber industries, furniture and fixtures, primary metal industries, and chemical and chemical products. The manufacturing categories marked with an * showed an increase at the national level as well as the provincial.

Tables 2 and 3 - Number of Production and Related Workers

Fifteen manufacturing categories in Ontario grew in terms of the number of workers employed between 1960 and 1969.

Of these 15, the following industry categories are noteworthy because they exhibited the largest employment growth during the 1960's:

textile industry, furniture and fixtures, paper and allied industries*, primary metal industries, chemical and chemical products*, metal fabricating, machinery industries, transportation equipment manufacturers*, and electrical products manufacturers. The last four were especially strong performers. The manufacturing categories marked with an * showed an increase in the number of people employed at the national as well as provincial level.

The general trend in Ontario of the rise in the number of people employed in a manufacturing category was strong

growth during the early 1960's with reduced or negative growth towards the end of the decade, particularly 1967 and 1968. Some recovery was experienced in 1969, in most manufacturing categories.

Tables 4 and 5 - Wages

All manufacturing categories for both Canada and Ontario experienced expansion of the amount paid for wages over the time periods covered. This was due to a combination of factors such as more workers, higher wages per worker over the time period, and inflation.

In Ontario, the increase in the amount paid to workers was particularly large in the following manufacturing categories: transportation equipment manufacturers, electronic products, machinery industries, metal fabricating, furniture and fixtures, textiles, and non-metallic minerals, all with increases of over 100%. In the paper and allied industries, chemical and chemical products and tobacco products the increase was not quite 100%. Wages paid in printing and publishing increased by more than 50%.

Table 6 - Index of Industrial Production

The manufacturing categories making the largest gains (more than 50 points) in productivity between the years 1967 and 1972 were the rubber industry, knitting mills, wood products industries, probably metal fabricating (although the 1967 figure was not available), transportation equipment manufacturers and chemical and chemical products.

Some others which gained between 40 and 50 points, were textiles, furniture and fixtures, primary metals, electrical products and petroleum and coal.

Conclusions Drawn from Tables 1 to 6 (See Figure 1)

The following manufacturing categories in Ontario experienced the greatest growth during the 1960's: transportation equipment manufacturers, metal fabricating industries, electrical products, furniture and fixtures, primary metals and chemical and chemical products. Two others, paper and allied industries and machinery industries indicated good growth except on the productivity index where they gained less than 40 points over the study period. The wood products industry is another growth industry despite a decrease in the number of firms for both Canada and Ontario possibly due to consolidation within the industry.

Table 7 - Number of Firms

The number of firms did not prove to be an important indicator. In Table 7, the number of firms in specific manufacturing industries is ranked in descending order for Ontario (1969) and Toronto (1967). However, the ranking is not particularly significant as a few large firms may employ many more people than a large number of small plants. Nor does the ranking indicate which industries are expanding by the addition of more firms.

FIGURE I

GROWTH INDUSTRY CATEGORIES

<u>INDUSTRY CATEGORY</u>	<u>PRODUCTION WORKERS</u>		<u>WAGES AND SALARIES</u>		<u>PRODUCTIVITY</u>	
	Ontario		Ontario		Canada	
	(thousands)	(millions of dollars)	(thousands)	(millions of dollars)	(thousands)	(millions of dollars)
	<u>1961</u>	<u>1969</u>	<u>1960</u>	<u>1969</u>	<u>1967</u>	<u>1972</u>
Transportation Equip. Mfrs.	42.0	75.2	199.2	583.3	217.5	340.4
Electrical Products	35.1	53.4	129.0	294.8	182.0	227.2
Machinery Industries	20.5	34.3	93.8	234.6	205.3	221.1
Metal Fabricating	40.9	60.6	169.4	385.1	162.9*	203.6
Furniture & Fixtures	12.2	17.3	42.1	86.3	155.4	199.5
Primary Metals	43.4	50.5	214.9	358.3	138.3	180.3
Chemical & Chemical Products	17.4	21.7	75.5	145.4	156.0	220.9
Paper & Allied Industries	28.7	34.3	125.2	229.8	129.8	150.2
Wood Products Industries	12.5	15.2	38.3	73.1	136.6	192.1

* Figure is for 1968 as 1967 production index was unavailable.

Examination of Table 7 will show that of the top manufacturing industries (in terms of numbers of establishments) approximately 1/2 gained in the number of firms. But, until the actual number of people involved is known there can be little significance attached to the increase in the number of firms in an industry. An industry which substantially increases its number of establishments may not be growing as fast as another, simply because its member firms are quite small.

Tables 8 and 9 - Number of Workers

Those manufacturing industries which displayed the largest gains in the number of workers employed over the 10 year period 1960-1969 were: motor vehicle parts and accessories, communications equipment manufacturers, plastic fabricators, machine shops, motor vehicle manufacturers, metal stamping, pressing and coating, manufacturers of electrical industrial equipment, aircraft and parts, wire and wire products, hardware tool and cutlery, and household radio and T.V. Many others showed smaller increases.

Tables 10 and 11 - Wages

For reasons already mentioned, an increase in the wage bill of an industry is not a very reliable indicator of growth. For example, seven manufacturing industries employed fewer people at the end of the 10 year study period than at the beginning, yet only three of those industries paid a lower

wage bill (bakeries, smelting and refining, and dairy products). All other manufacturing industries listed posted gains in the amount of money spent on labour in Ontario between 1960 and 1969. The industries showing the most gains (over 100%) were motor vehicle parts and accessories, motor vehicle manufacturers, communications equipment manufacturers, metal stamping, pressing, and coating, aircraft and parts manufacturers, plastic fabricators, hardware tool and cutlery manufacturers, iron foundries, glass and glass products, paper box and bag manufacturers.

Table 12 - Index of Industrial Production

The top manufacturing industries were ranked in descending order according to the index of industrial production for Canada for 1972. But of more importance than the ranking are those industries which display the largest increase in productivity between 1967 and 1972 inclusive. The motor vehicle and truck body and trailer manufacturers, gained in excess of 200 points. Three industries, motor vehicle parts and accessories, manufacturers of household radio and T.V., and steel pipe and tube mills, gained 100 or more points. Fourteen industries gained in excess of 50 points. These were: railroad rolling stock, distilleries, manufacturers of industrial chemicals, wire and wire products, ready mix concrete, metal stamping, pressing, and coating, iron foundries, sawmills and planing mills, veneer and plywood mills, rubber industries, knitting mills and petroleum and coal industries.

Analysis of Tables 7 to 12 (See Figure II)

After examining these tables, the following manufacturing industries were chosen as being the strongest growth industries in Ontario during the 1960's: motor vehicle parts and accessories, motor vehicle and truck body and trailer manufacturers, household radio and T.V., metal stamping, pressing and coating, wire and wire products, manufacturers of industrial chemicals, iron foundries, sawmills and planing mills, communications equipment manufacturers, plastic fabricators. The last one is small but growing rapidly and is not listed in Table 12.

A high degree of correlation exists between selected manufacturing industries and selected manufacturing categories. Motor vehicle parts and accessories and motor vehicle and truck body and trailer manufacturers are part of the transportation equipment manufacturers general industry category. Household radio and T.V. and communications equipment manufacturers are classified under electrical products; metal stamping, pressing and coating and wire and wire products under metal fabricating; iron foundries under primary metal industries; manufacturers of industrial chemicals under chemical and chemical products; saw mills and planing mills under wood industries, plastic fabricators under rubber and plastic products industries. Only two industry categories, paper and allied industries and machinery industries, appear

FIGURE II

GROWTH INDUSTRIES

INDUSTRY	PRODUCTION WORKERS		WAGES AND SALARIES		PRODUCTIVITY	
	1960	Ontario (thousands)	1960	Ontario (millions of dollars)	1967	Canada 1972
Motor Vehicle Parts & Accessories	11,331	32,746	51.1	235.0	345.6	355.5
Motor Vehicle Mfrs.	19,710	25,293	100.6	226.2	265.2	516.7
Household Radio & T.V. Mfrs.	2,237	4,543	7.2	20.8	192.8	324.8
Metal Stamping, Pressing, and Coating	9,096	14,301	38.1	87.4	164.3	224.2
Wire & Wire Products	5,442	8,614	23.6	54.5	147.3	234.9
Mfrs. of Industrial Chemicals	5,945	7,841	30.8	63.8	169.6	243.9
Iron Foundries	4,951	7,251	19.8	48.9	144.1	213.2
Sawmills & Planing Mills	3,765	5,255	10.4	24.8	140.7	207.3
Plastic Fabricators	4,442	10,716	8.0	51.5	Not Listed	
Communications Equipment Mfrs.	6,738	16,789	22.6	88.4	214.9	221.0

not to have any outstanding industries.

Conclusions

The study was successful primarily because the indicators chosen suited the needs of the study. The purpose of the study was to contribute to the selection of candidate industries for a new town, and to meet the requirements of a growing labour force for well paying job opportunities. The four indicators chosen have isolated industries which are not only growing rapidly to employ more people but are paying good and increasing wages.

A positive result from the use of each indicator (except perhaps for wages) can be used to postulate the existence of growth. If the number of firms in an industry increases over a period of time, this is probably counter to the trend to centralize into fewer larger plants and so this industry is probably expanding. When larger numbers of people are employed by an industry over time, this probably indicates growth because the general trend is often to raise productivity by substituting capital for labour due to the high cost of labour. When the productivity index for an industry increases, output must be expanding and, presumably, is serving a growing market.

The choice of four indicators obviates relying solely upon increased productivity to choose the growth industries. Also, the four indicators provide a check upon each other so that a good growth industry is unlikely to be missed. For example, wood products industries declined in the number of establishments in both Ontario and Canada over the time period studied. But, the number of workers increased, the amount of

wages increased and the productivity index went up for both Ontario and Canada over the same period of time. As a result wood products industries was selected as a growth industry.

Additional to its main purpose, this study may contribute to the discussion of what constitutes a growth industry in Ontario. But much work remains to be done in this area. The definition employed by this study is not the only one possible nor is it necessarily the best for all purposes. The data collected for Toronto leaves much to be desired. The productivity index is available only for Canada. This report suggests a starting point for further studies.



Ministry of
Housing

Hon. Donald R. Irvine, *Minister*
R. M. Warren, *Deputy Minister*